



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,520	10/02/2003	Kazuhiro Yokoyama	2462-139US	9330

7590 10/15/2004
Richard C. Woodbridge, Esq.
Synnestvedt Lechner & Woodbrige, LLP
P.O. Box 592
Princeton, NJ 08542-0592

EXAMINER

FERGUSON, MARISSA L

ART UNIT	PAPER NUMBER
----------	--------------

2854

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,520

Applicant(s)

YOKOYAMA, KAZUHIRO

Examiner

Marissa L Ferguson

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uribe et al. (US Patent 5,277,111) in view of Applicant Admitted Prior Art ("AAPA").

Regarding claims 1 and 15, Uribe et al. teaches a method and a cleaning unit (22a, 22b) capable of being in contact with or separated from a blanket cylinder that opposes said impression cylinder (Figure 3), a water dampening unit equipped with a water form roller (roller opposing 20a on Figure 3) capable of being in contact with or separated from a plate cylinder that opposes said blanket cylinder and supplying water to said plate cylinder (Figures 3,4 and 6), an inking unit (21a,21b) equipped with an ink form roller capable of being in contact with or separated from said plate cylinder and supplying ink to said plate cylinder and a controller (236) that executes a first control of causing said plate cylinder to contact with said blanket cylinder and said blanket cylinder to contact with said impression cylinder, and causing each cylinder to rotate under those contacts for a specified period of time while said cleaning unit is in contact with said blanket cylinder and a second control of separating said plate cylinder from

Art Unit: 2854

said blanket cylinder after a first control and causing said water form roller and said ink form roller to contact with said plate cylinder after the separation of said plate cylinder from said blanket cylinder(Column 11, Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55, Column 17, Lines 56-68, Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent), wherein said first control and second control are executed after a printing job (control has the capability to perform this function, Column 18, Lines 12-25, Lines 30-38 and reference made throughout patent).

However, he does not explicitly disclose an impression cylinder installed with a jacket with a metal plate including a base layer formed to have concave-convex profile on the surface of the metal plate with a low surface energy resin layer formed on said base layer and a cleaning unit that is located only at a blanket cylinder among other cylinders. AAPA discloses an impression cylinder with a jacket consisting of a metal plate with a low surface energy resin layer and a concave-convex profile base layer (Page 2, Lines 1-5) and a cleaning unit stationed only at a blanket cylinder (131a, Figure 3).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Uribe et al. to locate the cleaning unit only at the blanket cylinder as taught by AAPA, since AAPA teaches that is advantageous to soften an ink on a cylinder for the purpose of thoroughly cleaning a cylinder and also to include an impression cylinder in order to conduct two-sided printing in multicolor.

Regarding claims 2 and 16, Uribe et al. teaches a method and a controller (236), in executing said first control , after causing said blanket cylinder to rotate for a specified period of time while keeping said plate cylinder separated from said blanket cylinder and said blanket cylinder separated from said impression cylinder while keeping said cleaning unit in contact with said blanket cylinder, causes each cylinder to rotate for a specified period of time keeping said plate cylinder in contact with said blanket cylinder and said blanket cylinder in contact with said impression cylinder while keeping said cleaning unit in contact with said blanket cylinder (Column 11, Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55 , Column 17, Lines 56-68, Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent).

Regarding claims 3 and 9, Uribe et al. teaches the claimed invention, however he does not explicitly disclose a cleaning unit that is a nonwoven fabric cloth impregnated with washing liquids, which is supplied during a washing process. AAPA teaches a cleaning unit that is a nonwoven fabric cloth impregnated with washing liquid located only at a blanket cylinder, which is supplied during a washing process (Figure 1, Page 3, Lines 1-15). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Uribe et al. to include a non-woven fabric cloth as a cleaning unit as taught by AAPA, since AAPA teaches that is advantageous to soften an ink on a cylinder for the purpose of thoroughly cleaning a cylinder.

Regarding claim 4, Uribe et al. teaches wherein a washing liquid is a washing solvent and water and the washing solvent and water is supplied alternately during

Art Unit: 2854

a washing process (Column 11, Lines 33-55 and Column 15, Lines 14-55).

Regarding claim 5, Uribe et al. teaches wherein said first control ends when washing with supplied water ends (Column 11, Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55, Column 17, Lines 56-68, Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent).

Regarding claim 5, Uribe et al. teaches wherein said first control ends when washing with supplied water ends (Column 11, Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55, Column 17, Lines 56-68, Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent).

Regarding claim 6, Uribe et al. teaches a cleaning unit is a brush (24,28) to which washing liquid which is supplied during a washing process.

Regarding claim 7, Uribe et al. teaches a washing liquid that is a washing solvent and water and the washing solvent and water is supplied alternately during the washing process (Column 11, Lines 33-55 and Column 15, Lines 14-55).

Regarding claim 8, Uribe et al. teaches a first control ends when washing with supplied water ends (Column 11, Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55, Column 17, Lines 56-68, Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent).

Regarding claim 10, Uribe et al. teaches wherein said controller causes said water form roller to contact with said plate cylinder after causing said ink form roller to contact with said plate cylinder in executing said second control (Column 11, Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55, Column 17, Lines 56-68,

Art Unit: 2854

Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent).

Regarding claim 11, Uribe et al. teaches a plate cylinder to contact with a blanket cylinder to contact with an impression cylinder in a first control and a controller that causes a blanket cylinder to move to contact with an impression cylinder either simultaneous with or after causing a plate cylinder to contact with a blanket cylinder (Column 11 , Lines 33-55, Column 14, Lines 60-68, Column 15, Lines 1-55 , Column 17, Lines 56-68, Column 18, Column 19, Lines 18-30, Column 20, Lines 20-39 and references made throughout patent).

Regarding claims 12, 13 and 14, Uribe et al. teaches the invention claimed, however he does not explicitly disclose a base layer that is a metal thermal sprayed Ayer formed by thermally spraying metal, a porous ceramic thermal sprayed layer formed by thermally spraying ceramics on top of said metal thermal sprayed layer and wherein said low surface energy resin is a silicone group resin. AAPA teaches a base Ayer that is a metal thermal sprayed layer formed by thermally spraying metal (Page 2, Lines 1-17 and Page 5, Lines 26-31), a porous ceramic thermal sprayed Ayer formed by thermally spraying ceramics on top of said metal thermal sprayed Ayer (Page 2, Lines 1-17 and Page 5, Lines 26-3) and wherein said lowa surface energy resin is a silicone group resin (Page 2 Lines 5-7).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Uribe et al. to include a metal thermal sprayed base Ayer and a lowa surface energy sprayed Ayer as taught

Art Unit: 2854

by AAPA, since AAPA teaches to prevent the ink on paper immediately after printing from being transferred to a jacket.

Allowable Subject Matter

2. Claims 17-21 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: regarding claims 17 and 21, the prior art does not teach or render obvious a method comprising transferring washing fluid from said washing unit to said impression cylinder jacket via said blanket cylinder, said step of transferring comprising engaging, while rotating, said blanket cylinder with said impression cylinder jacket, with said plate cylinder and with said washing unit, thereby washing said impression cylinder jacket, removing washing fluid from said plate cylinder, said step of removing comprising disengaging said blanket cylinder from said impression cylinder jacket, said plate cylinder and said washing unit; providing a water roller capable of contacting said plate cylinder, providing an ink roller capable of contacting said plate cylinder and contacting, while rotating, said plate cylinder with said water roller and with said ink roller, such that said washing fluid is removed from said plate cylinder.

Response to Arguments

4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

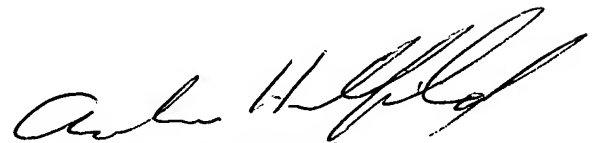
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other(F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirschfield can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson
Examiner
Art Unit 2854



ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800